

SEQUENCE LISTING

- (1) GENERAL INFORMATION:
- 5 (2) INFORMATION FOR SEQ ID NO:1:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH:
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY:linear
 - (ii) MOLECULE TYPE: DNA (oligonucleotide)
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:
- 15 FR-patched RFB4

VH:

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Full length cDNA sequence (SEQ ID no. 1):

GAAGTGCAGCTGCAGAGTCTGGGGGAGGCTTAGTGCAGCCTGGA

- 20 GGGTCCCTGAGGCTCTCCTGTGCAGCCTCTGGATTCTCCTTCAGTAT CTATGACATGTCTTGGGTTCGCCAGGCACCGGGAAAGGGGCTGGA GTGGGTCGCATACATTAGTAGTGGTGGTGGTACCACCTACTATCCA GACACTGTGAAGGGCCGATTCACCATCTCCAGAGACAATGCCAAG AACTCCCTGTACCTGCAAATGAACAGTCTGAGGGTGGAGGACACA
- 25 GCCTTATATTACTGTGCAAGACATAGTGGCTACGGTAGTAGCTACG GGGTTTTGTTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCT TCA

Full length amino acid sequence (SEQ ID no. 2):

- 30 EVQLLESGGGLVQPGGSLRLSCAASGFSFSIYDMSWVRQAPGKGLEW VAYISSGGGTTYYPDTVKGRFTISRDNAKNSLYLQMNSLRVEDTALYY CARHSGYGSSYGVLFAYWGQGTLVTVSS
 - N-terminal sense strand template DNA sequence (SEQ ID no. 3):
- 35 CCTGGAGGGTCCCTGAGGCTCTCCTGTGCAGCCTCTGGATTCTCCTT CAGTATCTATGACATGTCTTGGGTTCGCCAGGCACCGGGAAAGGGG CTGGAGTGGGTCGCATAC
 - 5' Primer for N-template (SEQ ID no. 4)
- 40 GAAGTGCAGCTGGAGTCTGGGGGAGGCTTAGTGCAGCCTGGA GGGTCCCTGAGG

C-terminal sense strand template DNA sequence (SEQ ID no. 6):

- 3' Primer for N-template (SEQ ID no. 5) GTAGGT<u>GGTACC</u>ACCACCACTACTAATGTATGCGACCCACTCCAGC CC

TTCACCATCTCCAGAGACAATGCCAAGAACTCCCTGTACCTGCAAA
TGAACAGTCTGAGGGTGGAGGACACAGCCTTATATTACTGTGCAAC
ACATAGTGGCTACGGTAGTAGCTACGGGGTTTTGTTTGCT

- 5 5' Primer for C-template (SEQ ID no. 7)
 GGTGGTACCACCTACTATCCAGACACTGTGAAGGGCCGATTCACCA
 TCTCCAGAGACAAT
 - 3' Primer for C-template (SEQ ID no. 8)
- 10 TGAAGAGACAGTGACCAGAGTCCCTTGGCCCCAGTAAGCAAACAA AACCCCGTAGCT

Joining site: KpnI

15 VK:

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Full length cDNA sequence (SEQ ID no. 9)
GATATCCAGATGACCCAGTCTCCATCCTCCTGTCTGCGCTCTGTGGG
AGACAGAGTCACCATTAGTTGCAGGGCAAGTCAGGACATTAGCAA

- 20 TTATTTAAACTGGTATCAGCAGAAACCAGGTAAGGCTCCGAAACTC
 CTGATCTACTACACTAGTATATTACACTCAGGAGTCCCATCAAGGT
 TCAGTGGCAGTGGGTCTGGAACAGAATTTACTCTCACCATTAGCTC
 CCTGCAGCCAGAAGATTTTGCCACTTACTTTTGCCAACAGGGTAAT
 ACGCTTCCGTGGACGTTCGGTGGAGGCACCAAGGTGGAAATCAAA
- Full length amino acid sequence (SEQ ID no. 10)
 DIQMTQSPSSLSASVGDRVTISCRASQDISNYLNWYQQKPGKAPKLLIY
 YTSILHSGVPSRFSGSGSGTEFTLTISSLQPEDFATYFCQQGNTLPWTFG
 GGTKVEIK
- N-terminal sense strand template DNA sequence (SEQ ID no. 11)
 CTGTCTGCCTCTGTGGGAGACAGAGTCACCATTAGTTGCAGGGCAA
 GTCAGGACATTAGCAATTATTTAAACTGGTATCAGCAGAAACCAGG
 TAAGGCTCCGAAACTC
- 5' Primer for N template (SEQ ID no. 12)
 GATATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCGGAGAC
- 40 3' Primer for N-template (SEQ ID no. 13) ATATACTAGTGTAGTAGATCAGGAGTTTCGGAGCCTTACC

C-terminal sense strand template DNA sequence (SEQ ID no. 14) CCATCAAGGTTCAGTGGCAGTGGGTCTGGAACAGAATTTACTCTCA

- - 5' Primer for C-template (SEQ ID no. 15)
 CTAC<u>ACTAGT</u>ATATTACACTCAGGAGTCCCATCAAGGTTCAGTGGC
 AGT

	TTTGATTTCCACCTTGGTGCCTCCACCGAACGTCCACGGAAGCGTA TT
5	Joining site: SpeI A [∇] CTAG _Δ T
10	FR-Patched chimeric 1F5
10	VH:
15	Full length cDNA sequence (SEQ ID no. 17): CAGGTGCAACTGGTGGCTTCCGGGGCTGAGGTAAATAAGCCTGGG GCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGCTACACATTTACCA GTTACAATATGCACTGGGTACGGCAGCCTCCTGGAAGGGGCCTGGA ATGGATTGGAGCTATTTATCCAGGAAATGGTGATACTAGTTACAAT
20	CAGAAATTCAAGGGCAAGGCCACATTGACTGCAGACAAATCCTCC AGCACAGCCTACATGCAGCTCAGCAGTCTGACATCTGAGGACTCTG CGGTCTATTACTGTGCAAGATCGCACTACGGTAGTAACTACGTAGA CTACTTTGACTACTGGGGCCAAGGCACCACTGTTACAGTCTCCTCT GATCA
25	Full-length amino acid sequence (SEQ ID no. 18): QVQLVASGAEVNKPGASVKVSCKASGYTFTSYNMHWVRQPPGRGLE WIGAIYPGNGDTSYNQKFKGKATLTADKSSSTAYMQLSSLTSEDSAVY YCARSHYGSNYVDYFDYWGQGTTVTVSSD
30	N-terminal sense strand template DNA sequence (SEQ ID no. 19): AATAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGCT ACACATTTACCAGTTACAATATGCACTGGGTACGGCAGCCTCCTGG AAGGGGCCTGGAATGGATTGGA
35	5' Primer for N-template (SEQ ID no. 20) CAGGTGCAACTGGTGGCTTCCGGGGCTGAGGTAAATAAGCCTGGG GCCTCAGTGAAG
40	3' Primer for N-template (SEQ ID no. 21) TGTAACTAGTATCACCATTTCCTGGATAAATAGCTCCAATCCATTCC AGGCCCCT
45	C-terminal sense strand template DNA sequence (SEQ ID no. 22): TTGACTGCAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCA GTCTGACATCTGAGGACTCTGCGGTCTATTACTGTGCAAGATCGCA CTACGGTAGTAACTACGTAGACTACTTTGACTAC
50	5' Primer for C-template (SEQ ID no. 23) TGATACTAGTTACAATCAGAAATTCAAGGGCAAGGCCACATTGACT GCAGACAAATCCTCC

3' Primer for C-template (SEQ ID no. 24)
TGATCAGAGGAGACTGTAACAGTGGTGCCTTGGCCCCAGTAGTCAA
AGTAGTCTACGTA

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Joining site: SpeI

VK:

- Full-length cDNA sequence (SEQ ID no. 25):
 GATATTCAACTCACACAGTCTCCATCAAGTCTTCTGCATCTGTGGG
 GGACAGAGTCACAATTACTTGCAGGGCCAGCTCAAGTTTAAGTTTC
 ATGCACTGGTACCAGCAGAAGCCAGGATCCTCCCCCAAACCCTGGA
 TTTATGCCACATCCAACCTGGCTTCCGGAGTCCCTAGTCGCTTCAGT
- 15 GGCAGTGGGTCTGGGACCGAGTTCACTCTCACAATCAGCAGTTTGC AGCCTGAAGATTTCGCCACTTATTTCTGCCATCAGTGGAGTAGTAA CCCGCTCACGTTCGGTGCTGGGACCAAGCTGACCGTTCTACGG

Full-length amino acid sequence (SEQ ID no. 26):

- 20 DIQLTQSPSSLSASVGDRVTITCRASSSLSFMHWYQQKPGSSPKPWIYA TSNLASGVPSRFSGSGSGTEFTLTISSLQPEDFATYFCHQWSSNPLTFGA GTKLTVLR
 - N-terminal sense strand template DNA sequence (SEQ ID no. 27):
- 25 TCAAGTCTTTCTGCATCTGTGGGGGACAGAGTCACAATTACTTGCA GGGCCAGCTCAAGTTTAAGTTTCATGCACTGGTACCAGCAGAAGCC AGGATCCTCCCCCAAACCCTGGATTTATGCCACATCC
 - 5' Primer for N-template (SEQ ID no. 28):
- 30 GATATTCAACTCACACAGTCTCCATCAAGTCTTTCTGCATCTGTG
 - 3' Primer for N-template (SEQ ID no. 29): GGACTCCGGAAGCCAGGTTGGATGTGGCATAAATCCAGGG
- 35 C-terminal sense strand template DNA sequence (SEQ ID no. 30):
 TTCAGTGGCAGTGGGTCTGGGACCGAGTTCACTCTCACAATCAGCA
 GTTTGCAGCCTGAAGATTTCGCCACTTATTTCTGCCATCAGTGGAGT
 AGTAACCCGCTCACGTTCGGTGCTGGG
- 5' Primer for C-template (SEQ ID no. 31):
 GGCTTCCGGAGTCCCTAGTCGCTTCAGTGGCAGTGGGTCTGGG
 - 3' Primer for C-template (SEQ ID no. 32): CCGTAGAACGGTCAGCTTGGTCCCAGCACCGAACGTGAGCGG

Joining site: BspEI

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